

US EPA ARCHIVE DOCUMENT

GLBTS Mercury Workgroup Meeting

December 12, 2007

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Northeast Ohio Regional Sewer District

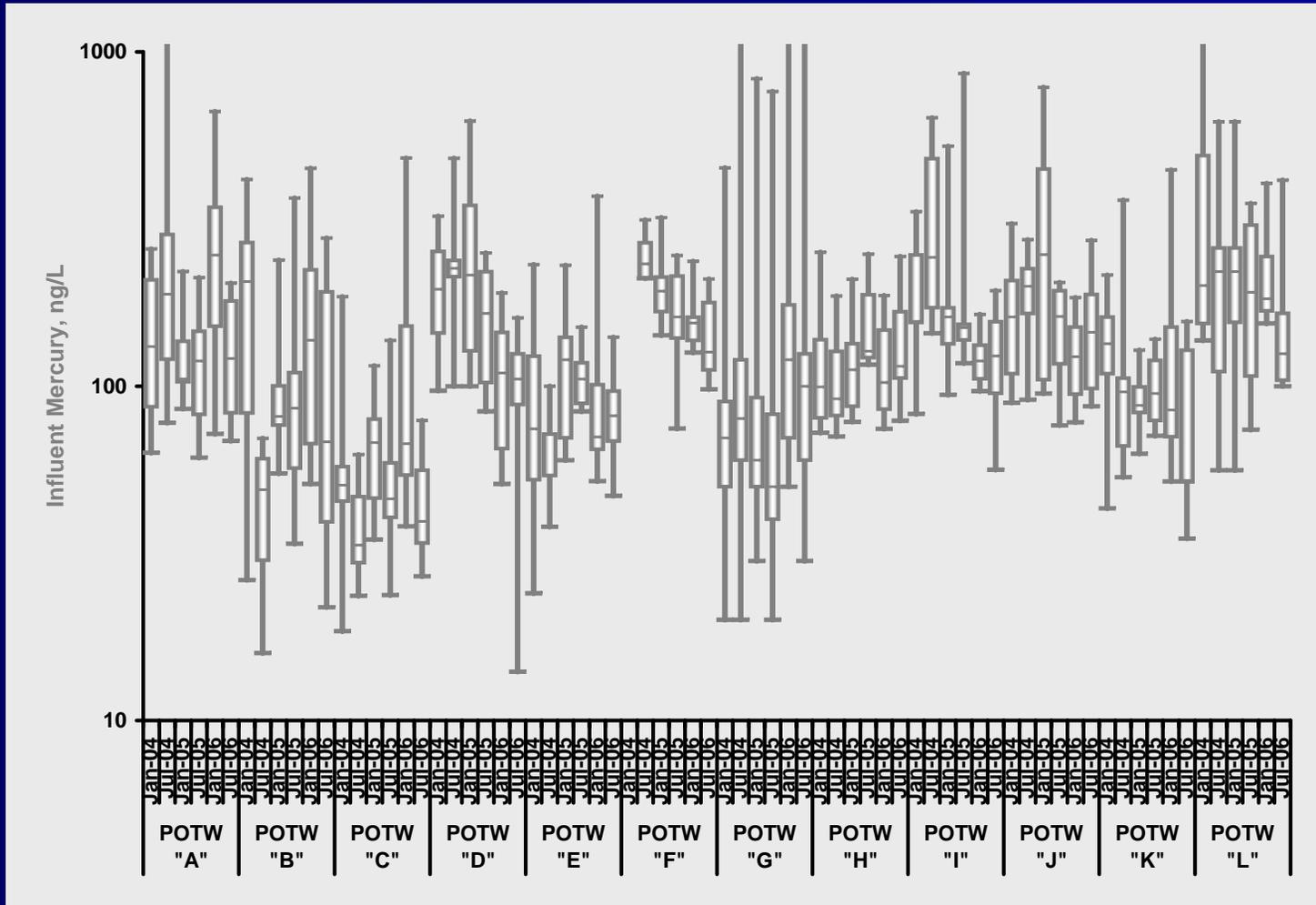
An Examination of Mercury Levels at Clean Water Agencies 2003-2006

National Association of Clean
Water Agencies

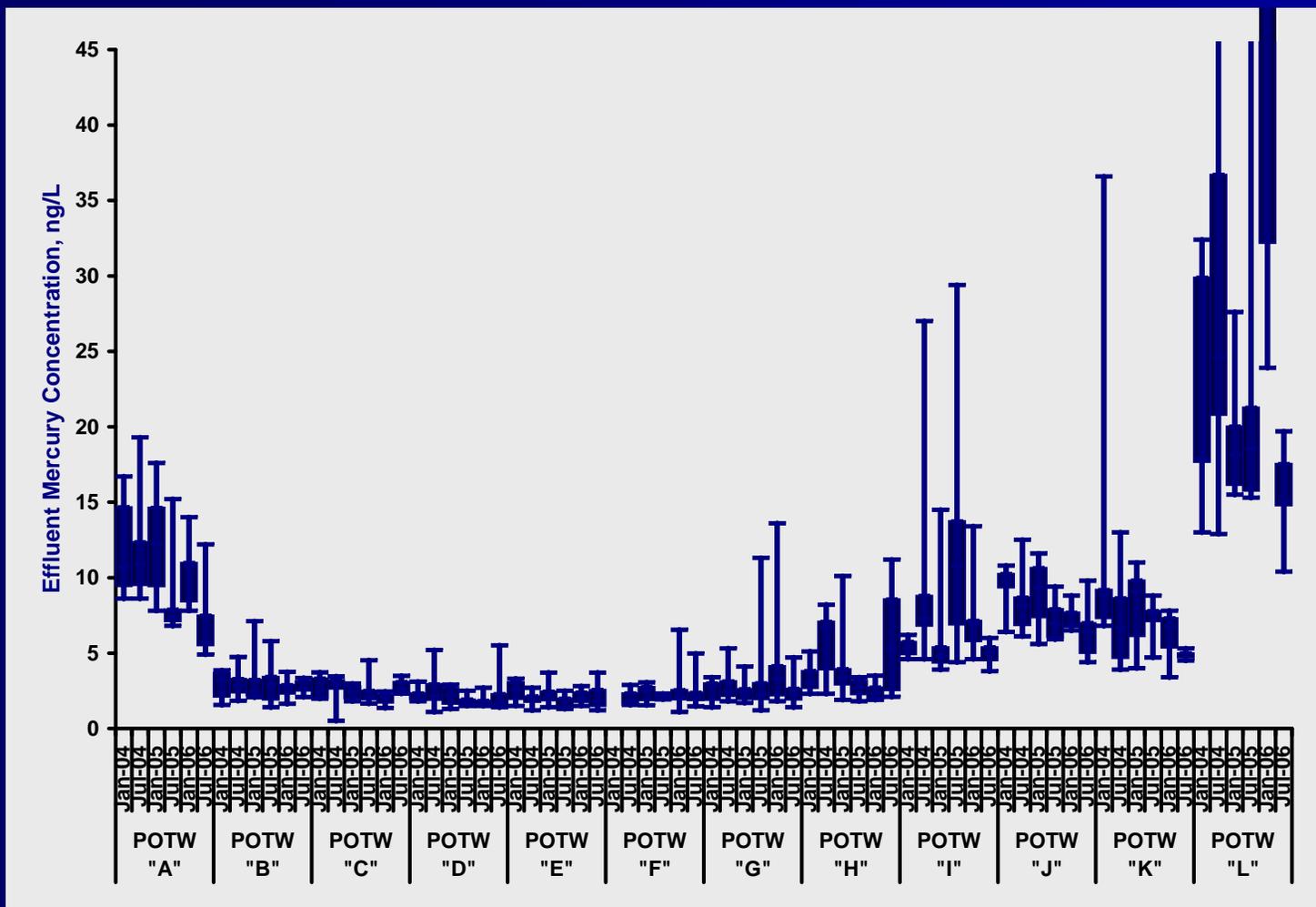
The Study

- 12 POTWs
- Various stages of mercury control programs
- Variables
- Methods
- Individually and Collectively

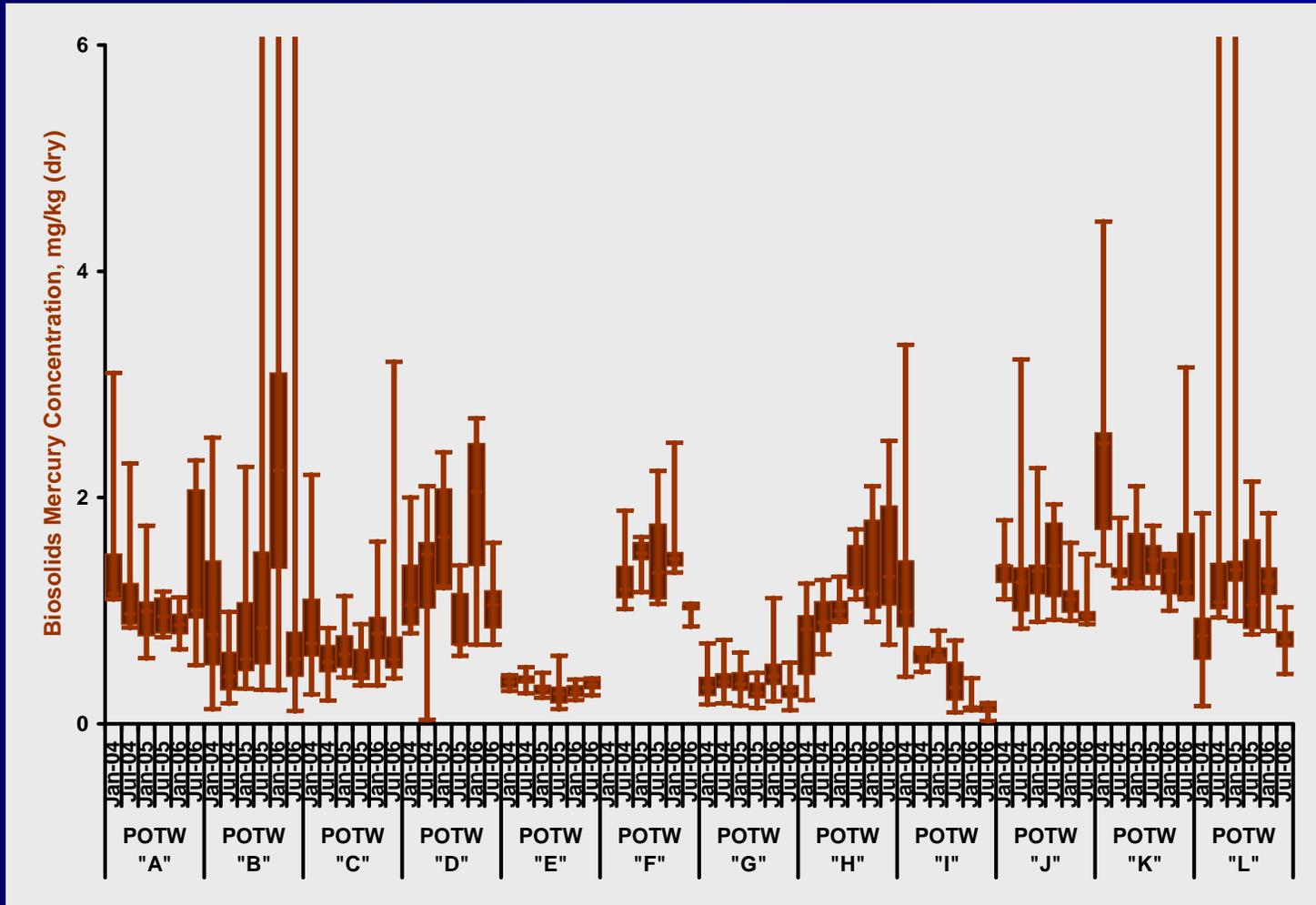
Influent



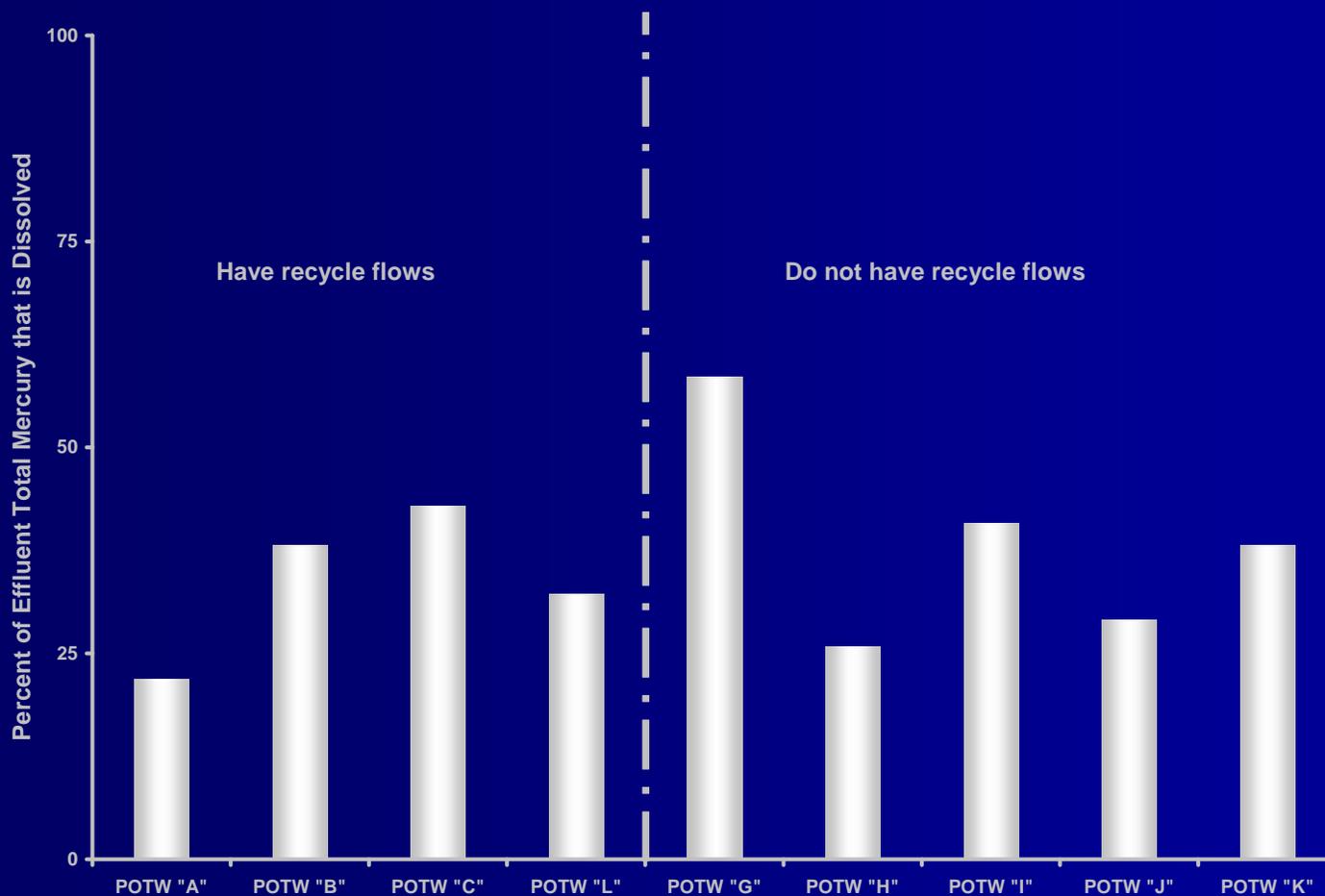
Effluent



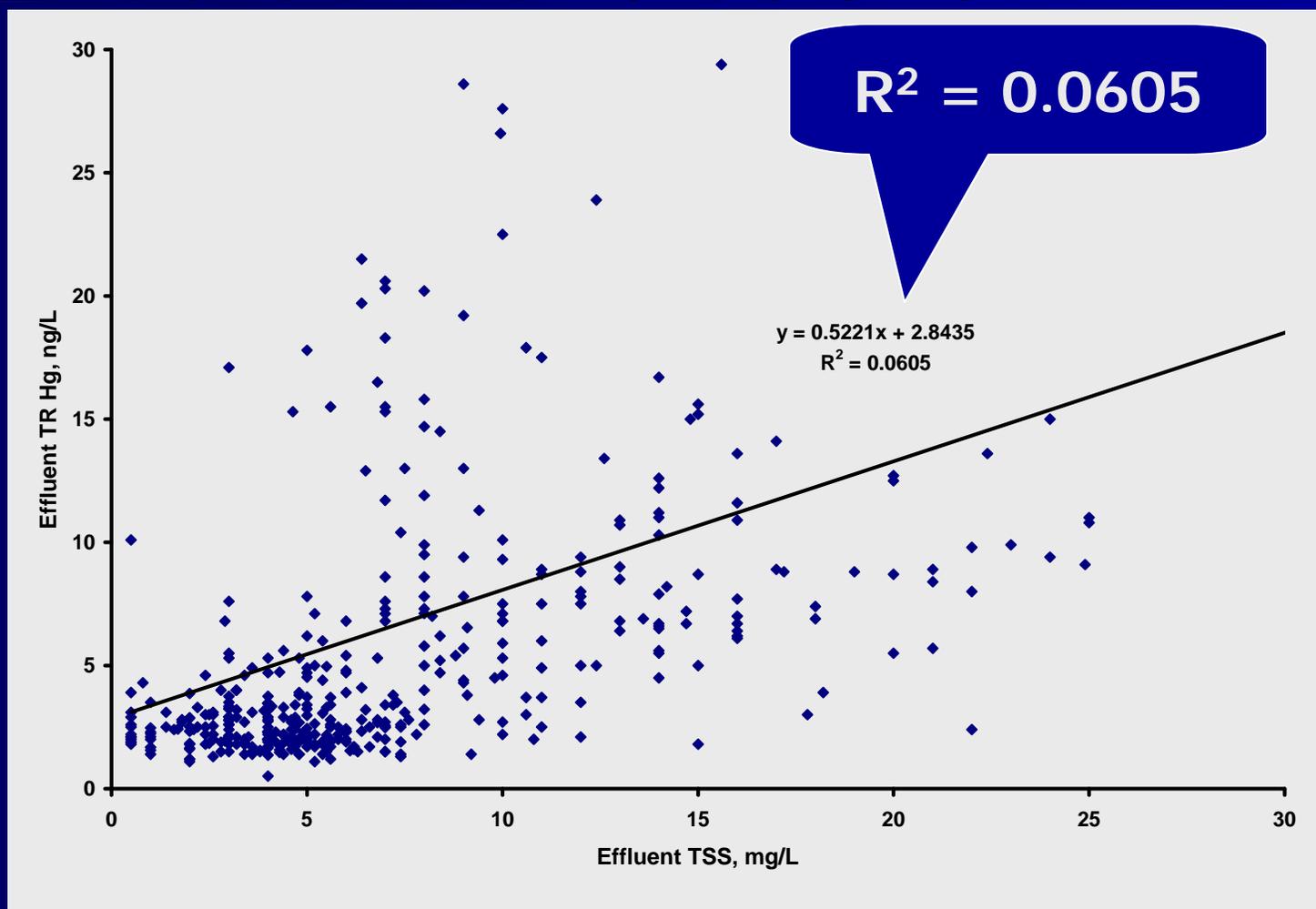
Biosolids



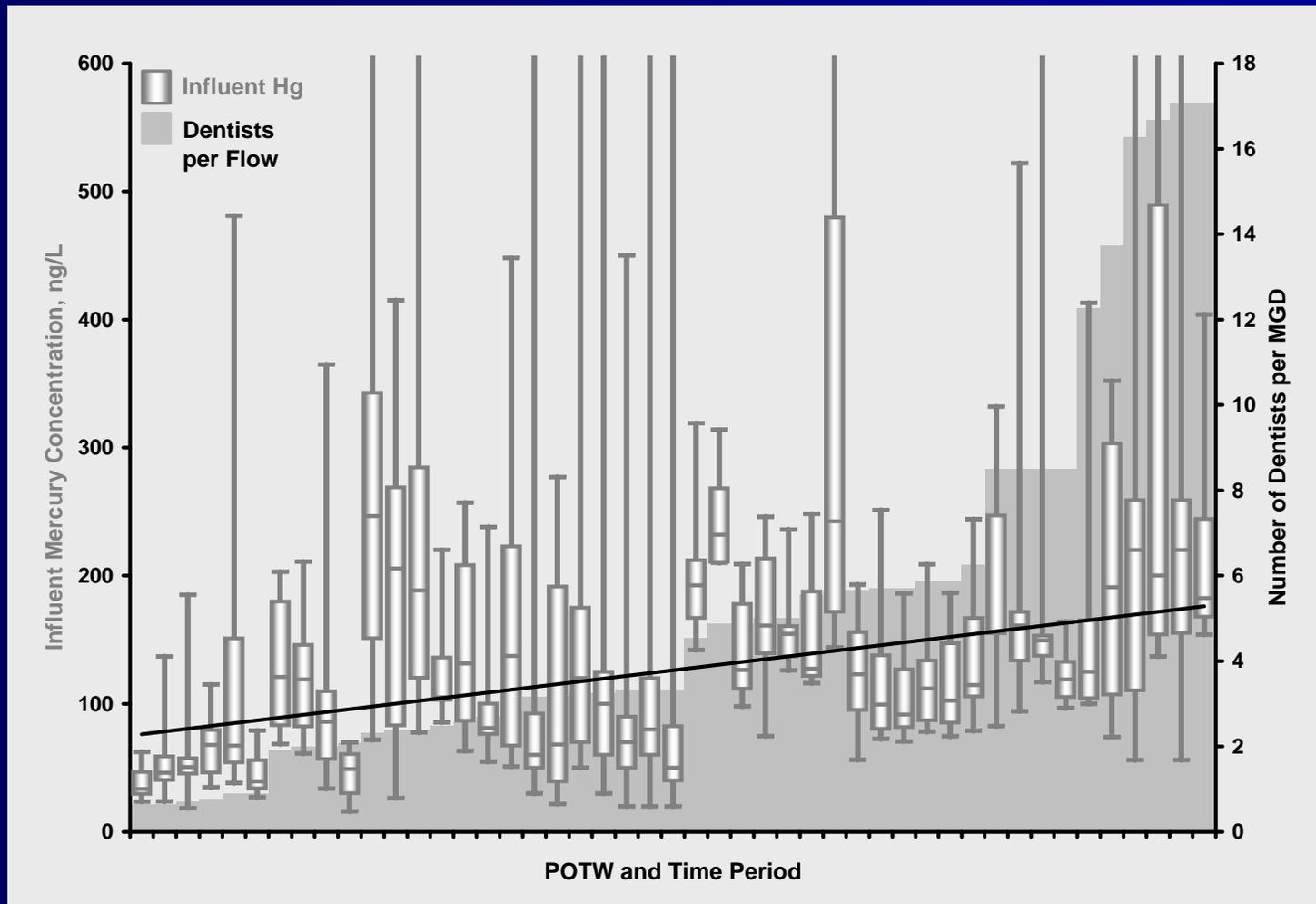
Dissolved Mercury Concentrations



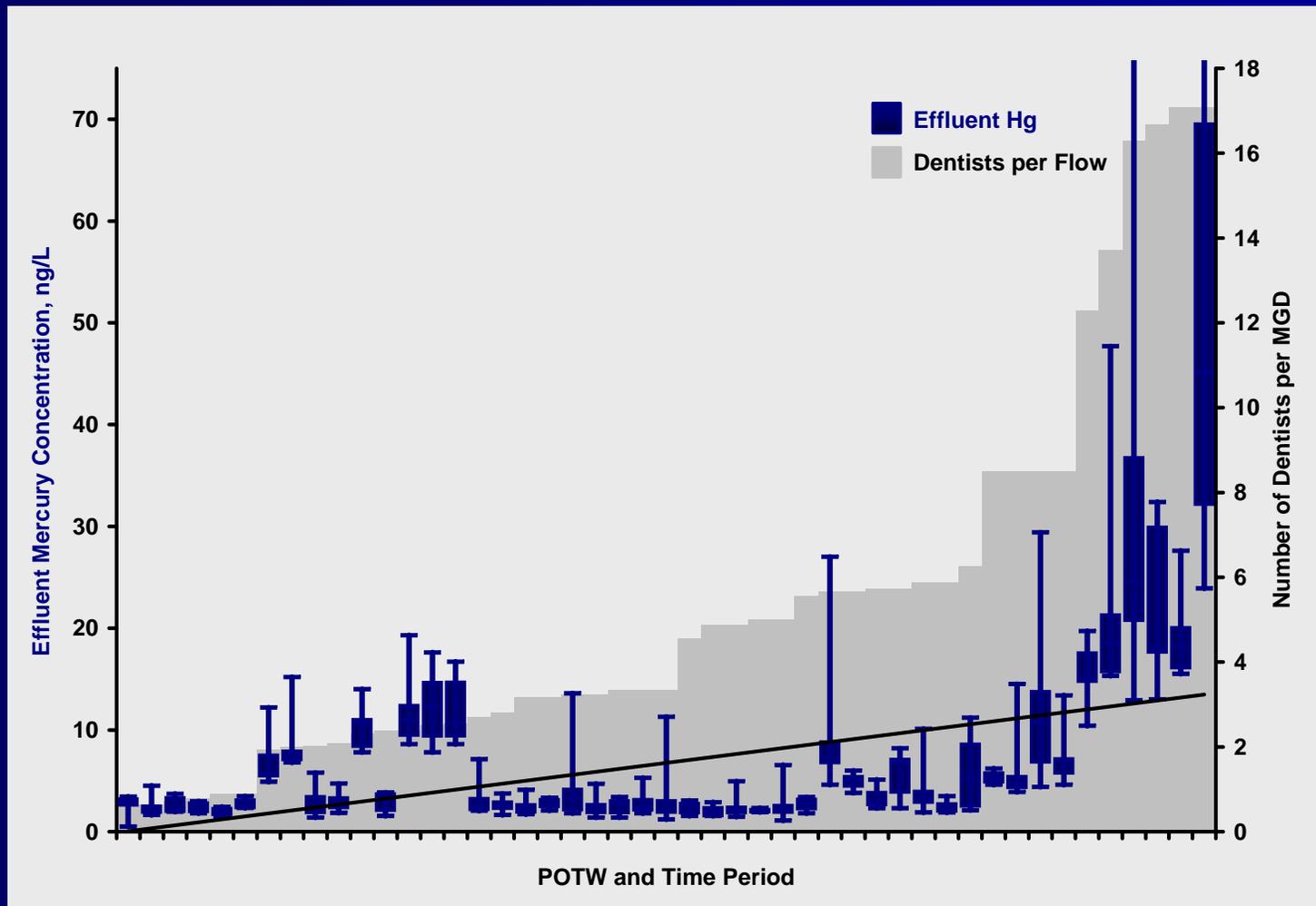
Effluent Mercury Concentrations and Effluent TSS Concentrations



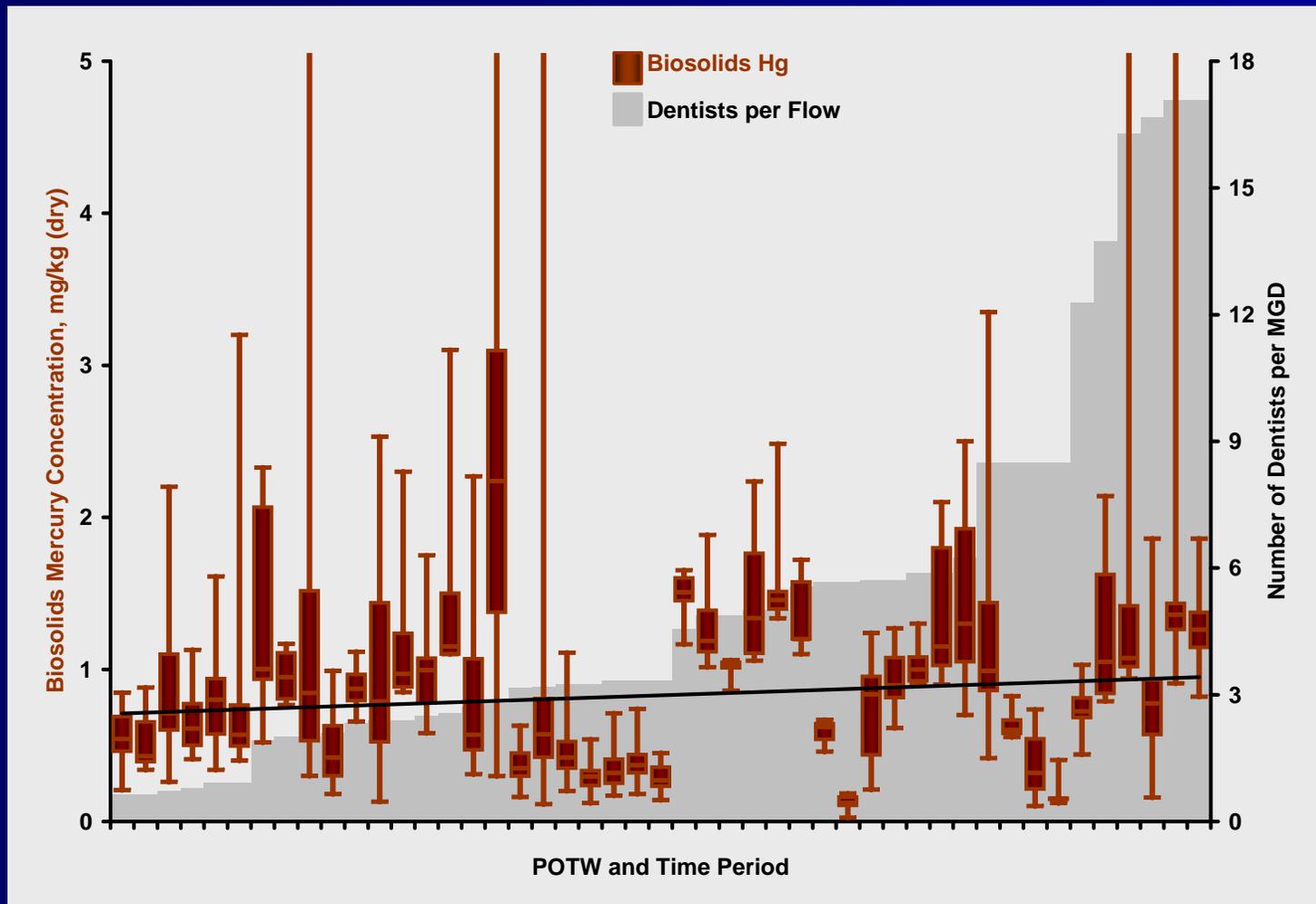
Relationships with Dentists and Mercury Concentrations



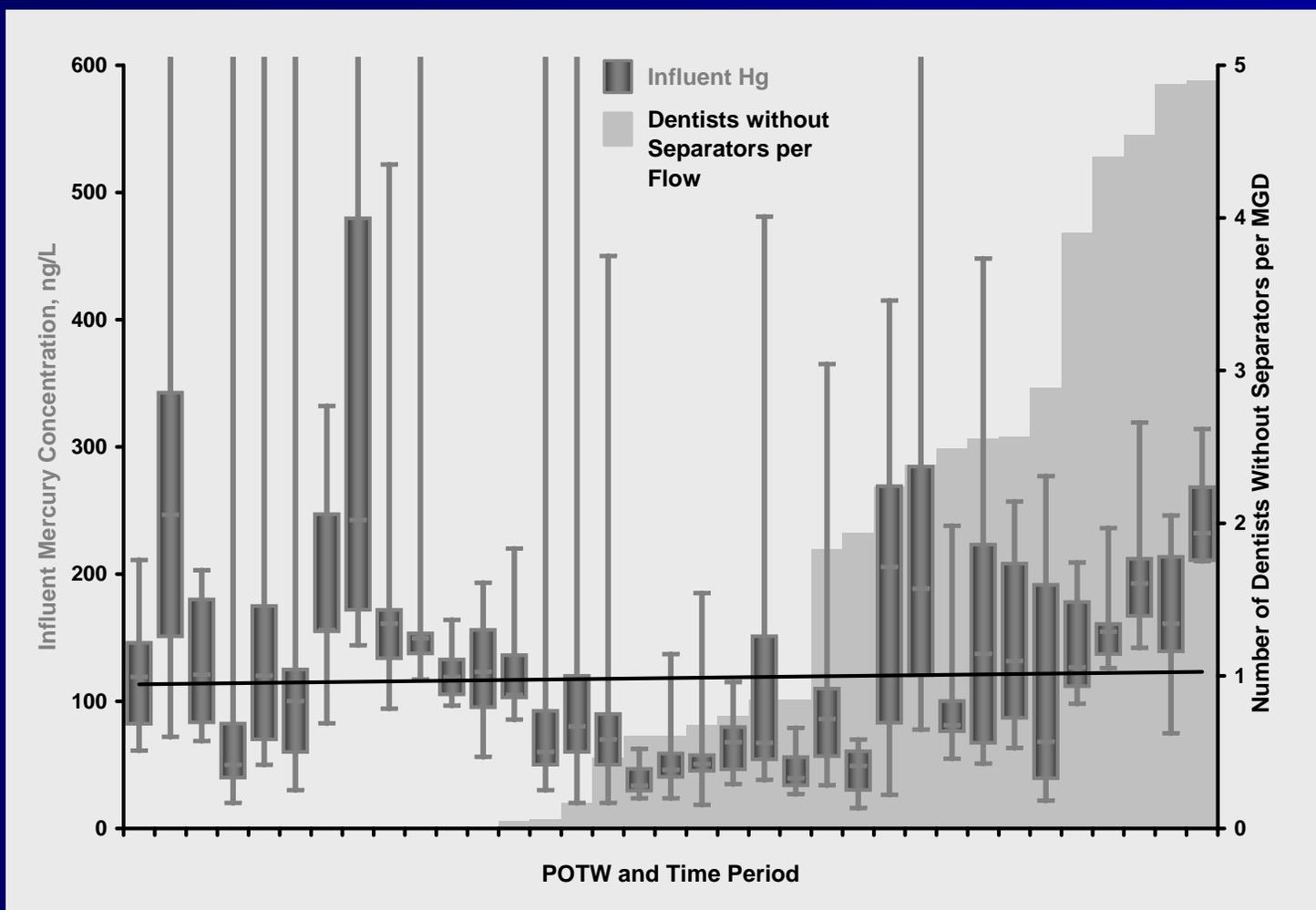
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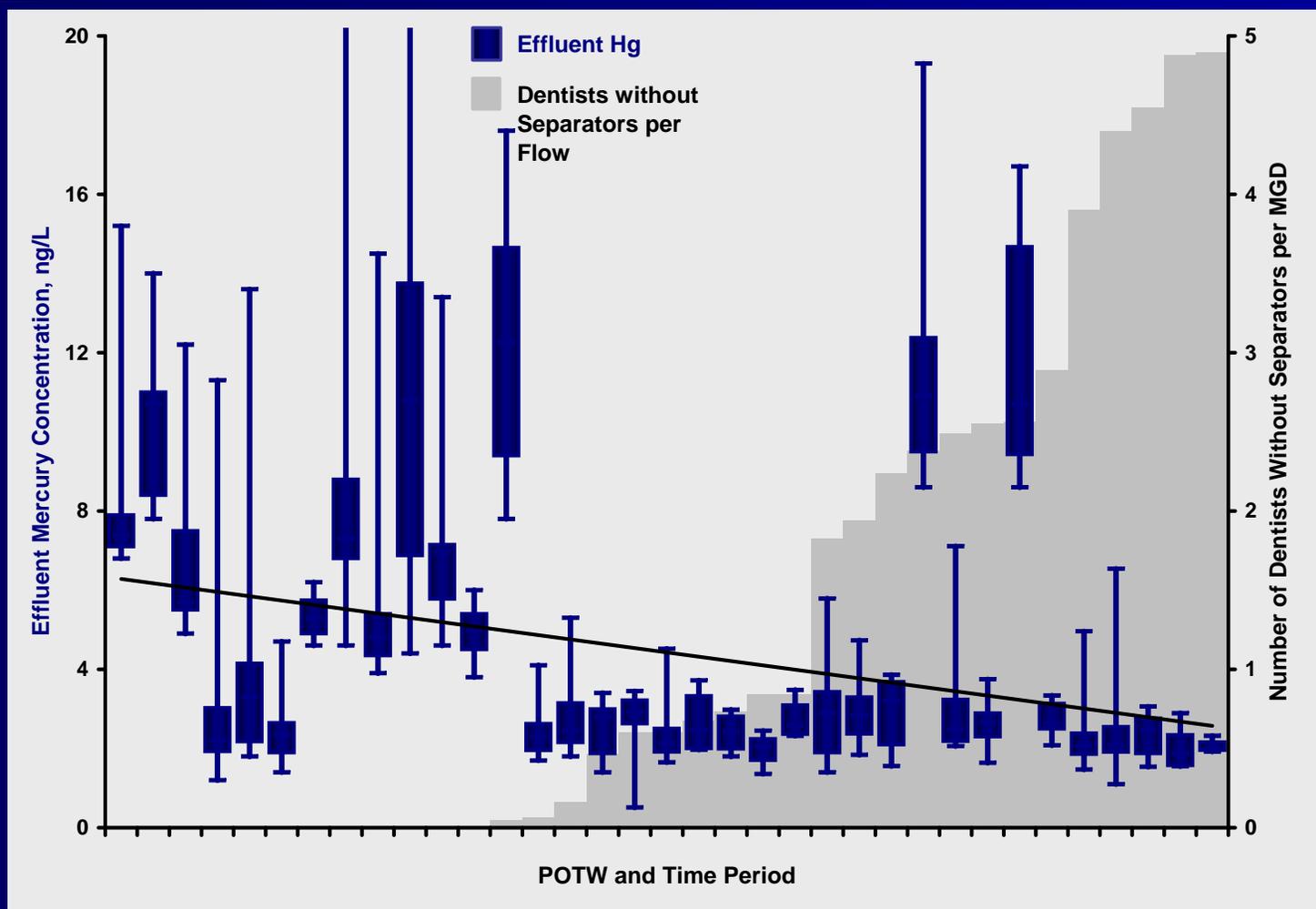
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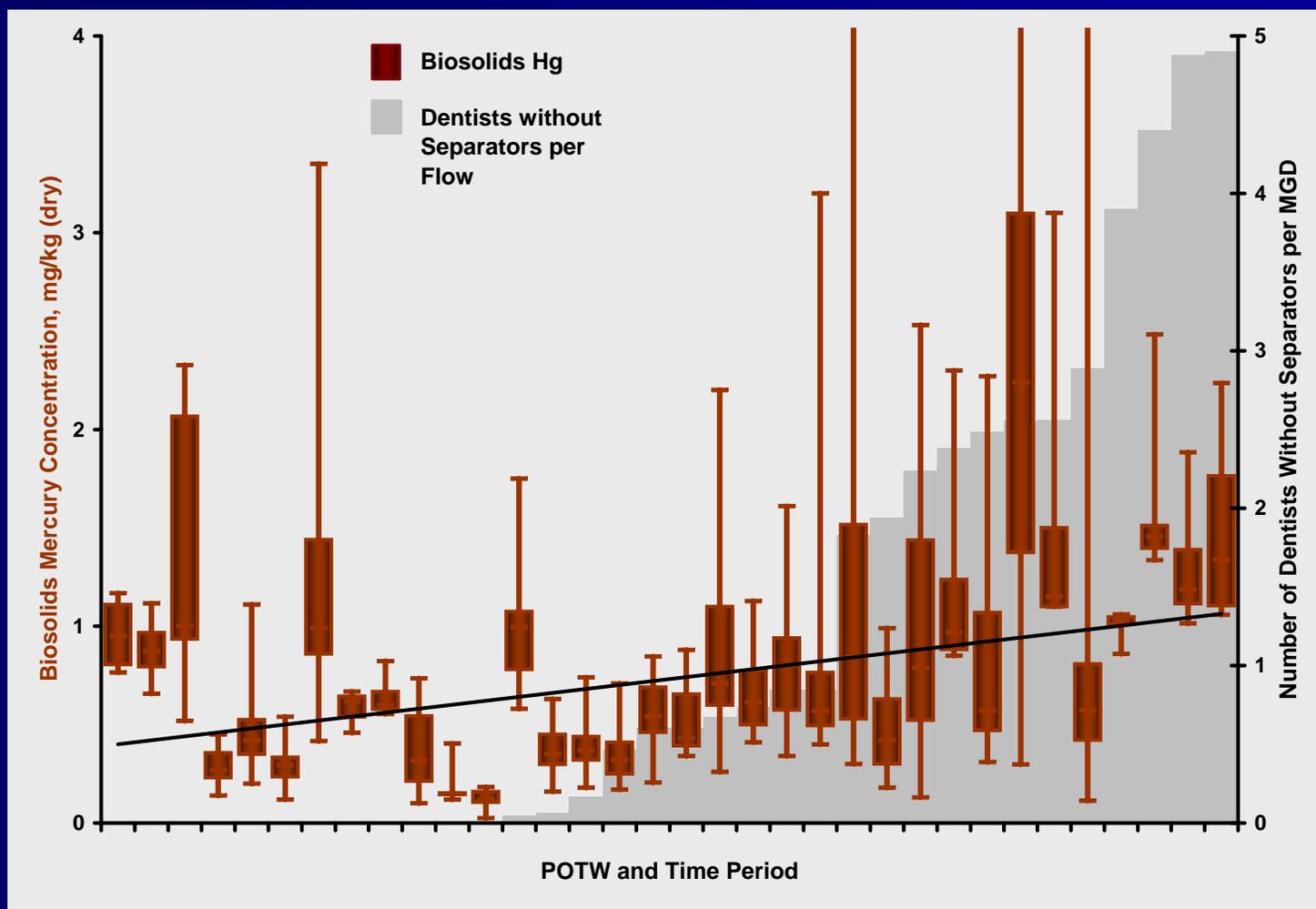
Dentists w/o Separators per Flow



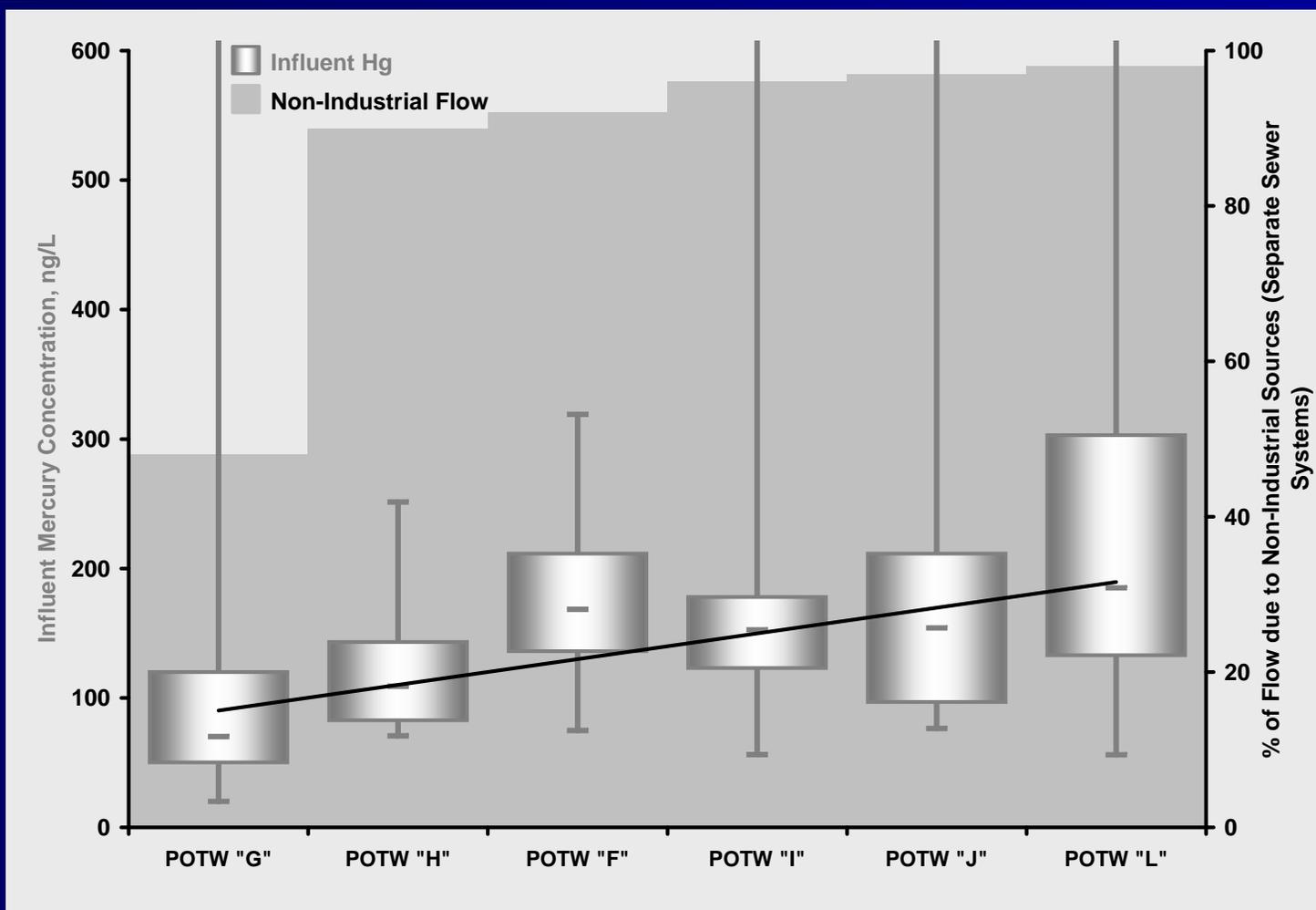
Dentists w/o Separators per Flow



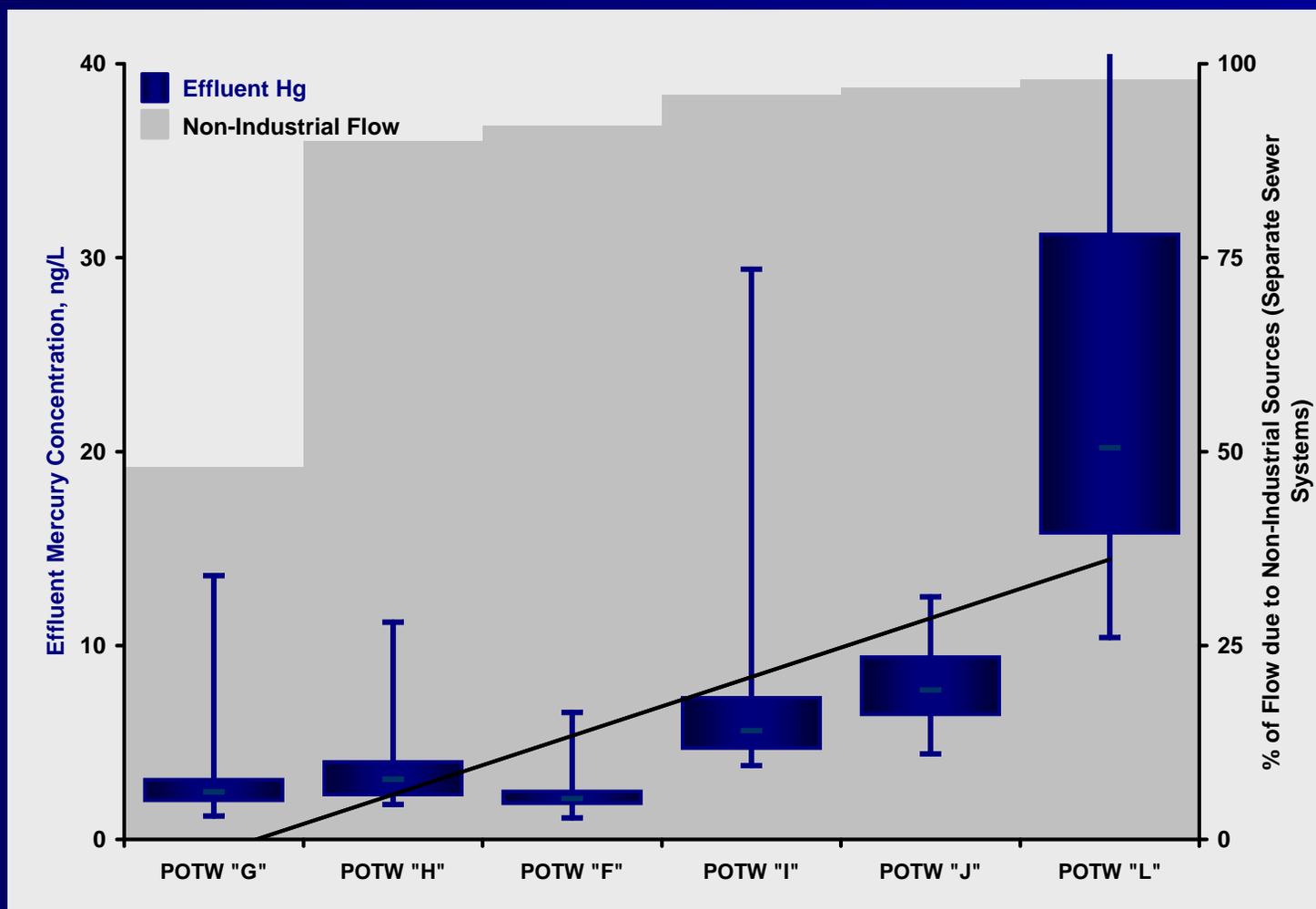
Dentists w/o Separators per Flow



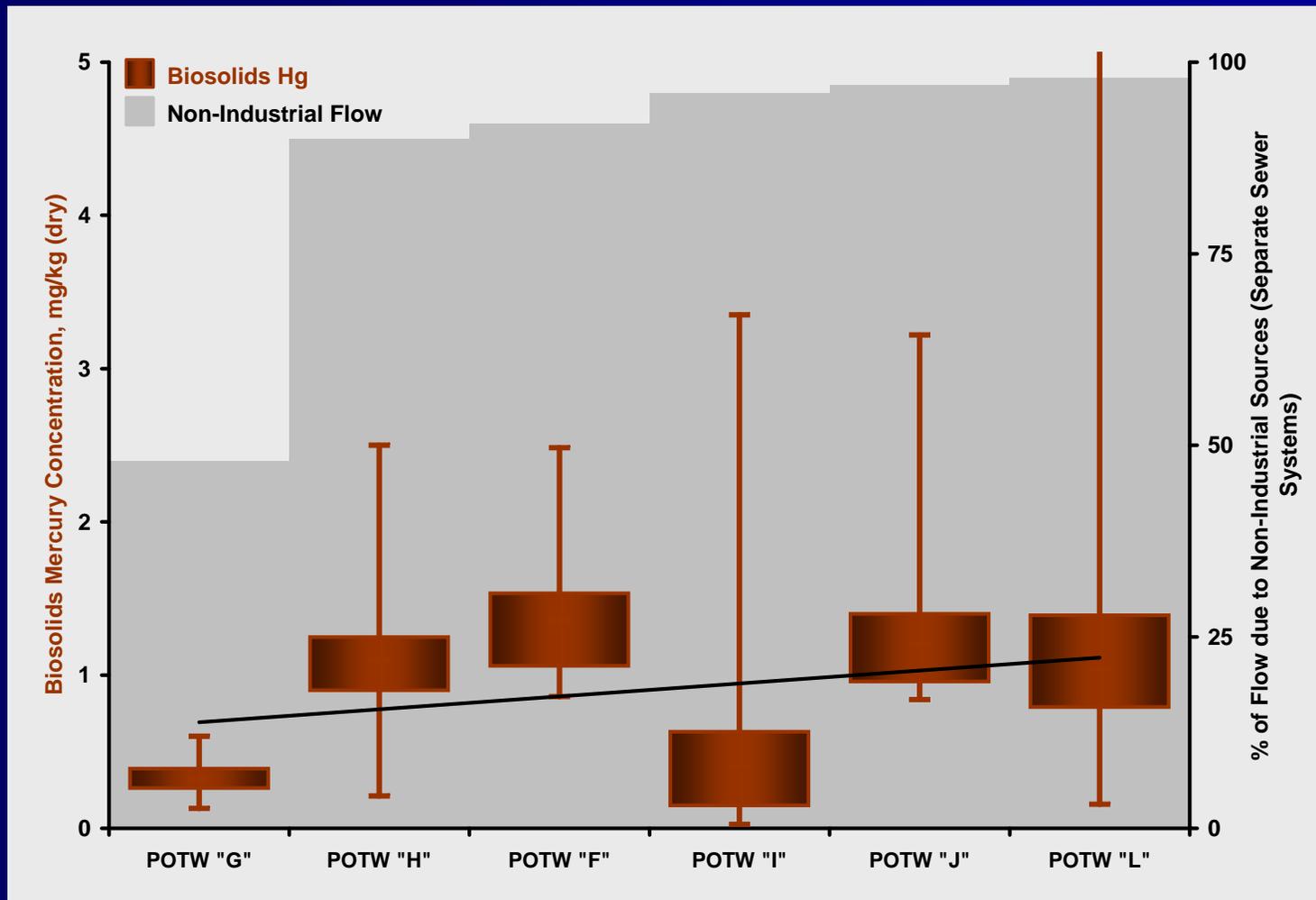
Non-Industrial Flow



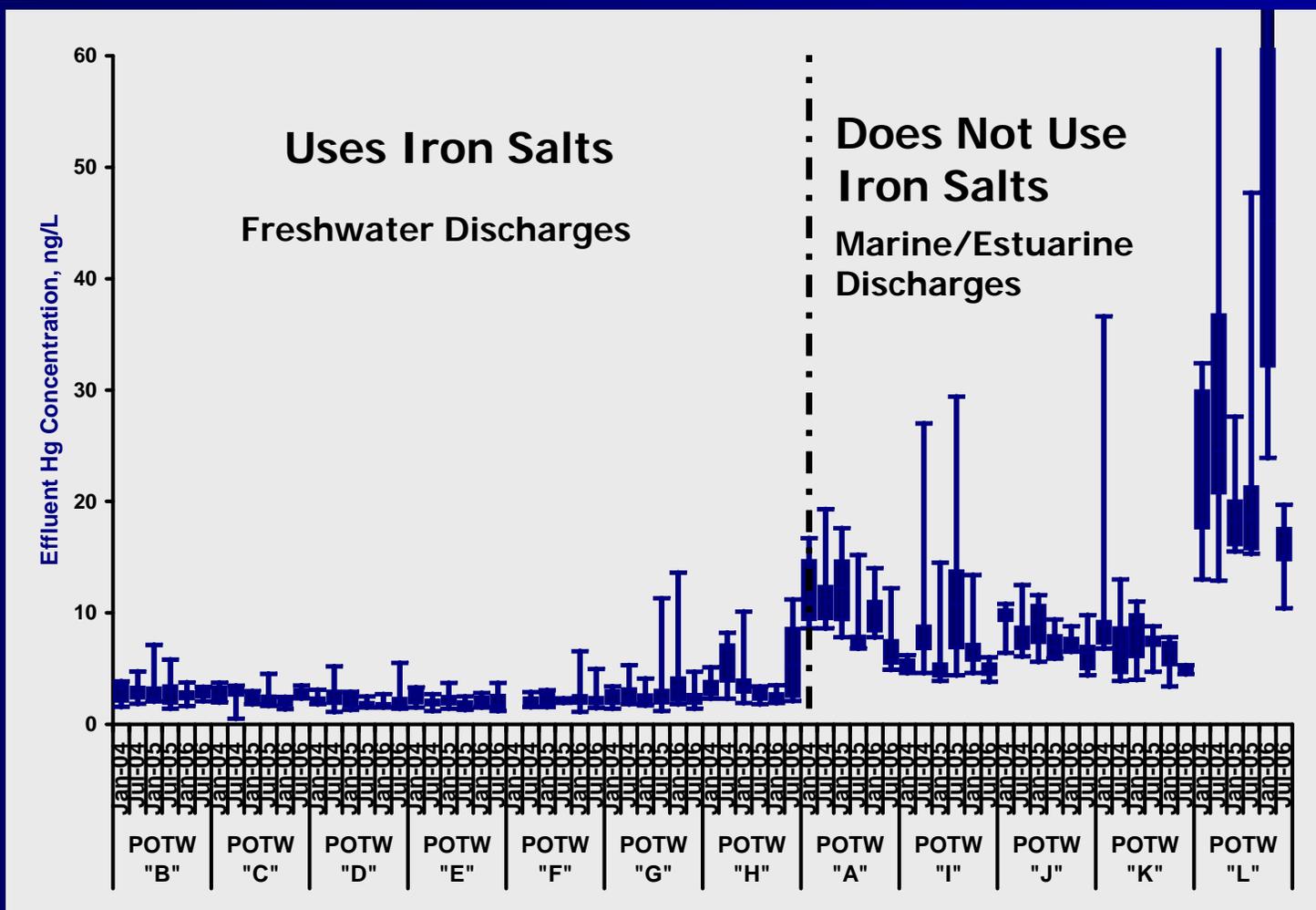
Non-Industrial Flow



Non-Industrial Flow



Iron Salts/Freshwater



Significant Findings

- Dissolved Mercury
- Hg and TSS
- Mercury Concentrations and Dentists
- Dentists without Separators per Flow
- Non-Industrial Flow
- Iron Salts/Freshwater

So Now What...

- Several implications for further research
- Other uses of the data that could lead to improved understanding
- Using the data that has already been collected
- Supplementing the collected data

So Now What...

- Dissolved Hg Data
- Influent Variability
- Loadings
 - Influent
 - Biosolids
 - Effluent

So Now What...

- Iron Salts/Freshwater Discharges
- Treatment Chemicals
- Composite Samples versus Grab Samples
- Temporal Differences
- Follow-up sampling and analysis

Acknowledgements

- HRSD Central Environmental Laboratory
- Steve Anderson
- Keith Linn
- Seth Hothem
- Chris Hornback
- All of the Participating Agencies